REMARKS

As a preliminary matter, Applicants thank the Examiner for the allowance of claims 1-2 and 4-8.

As a second preliminary matter, with respect to the rejections of claims 9, 17-18, and 20, Applicants traverse the rejections in their entirety as being nonresponsive. The Examiner incorrectly asserts that the rejection of claims 17-18 under Section 102(e) based on the Nishiguchi reference (U.S. 6,226,067) is a "new grounds of rejection." In fact, this rejection is an exact repeat of the rejection asserted by the Examiner in Paper No. 0104, but which the Examiner withdrew from subsequent Office Actions after Applicants successfully traversed the rejection in Amendment D, filed July 9, 2004. The Examiner has a burden to answer all meritorious arguments traversing a rejection before repeating the rejection. The Examiner may not avoid this burden by only temporarily withdrawing the grounds for rejection.

With respect to claim 9 of the present invention, the Examiner has entirely ignored some of Applicants' arguments traversing the rejection based on the Von Gutfeld reference (U.S. 6,179,679 "Von Gutfeld I"), and has not answered most of the substance of the other arguments against this same reference. As previously argued, claim 9 of the present invention recites, among other things, that the light reflection layer is formed only in an area under the sealing material on one of the substrates. In other words, claim 9 specifically excludes the light reflection layer from being formed elsewhere than under the sealing

material. Von Gutfeld, however, provides no teaching or suggestion that the reflector 401 is formed only under the sealing material. Because the Examiner has not even attempted to rebut this argument, the rejection should be withdrawn.

Additionally, the rejection of claim 9 should be withdrawn because Von Gutfeld fails to teach or suggest that its reflector has a concavo-convex structure, contrary to the Examiner's assertions. The Examiner asserts that Fig. 4 of Von Gutfeld I somehow "clearly shows" a concavo-convex structure, but Fig. 4 shows nothing of the sort. Fig. 4 only shows a rough surface to its reflector 401, but does not teach or even suggest that this surface has a regular concavo-convex structure, as in the present invention. In fact, as previously pointed out to the Examiner, the text from Von Gutfeld I that accompanies Fig. 4 expressly teaches away from the Examiner's interpretation of the drawing. Col. 4, lines 32-34 of Von Gutfeld I specifically teaches that the reflector 401 is "smooth, preferably unpolished or with micron sized asperities to provide diffuse reflection." A "smooth" surface expressly teaches away from a concavo-convex structure.

Furthermore, claim 9 of the present invention specifically recites that the concavo-convex structure of the present invention also has inclined surfaces. Fig. 4 of Von Gutfeld I, however, does not teach or even suggest such inclined surfaces. As described above, Von Gutfeld only teaches that diffuse reflection is provided according to the "micron sized asperities" in the reflector 401. One skilled in the art would clearly understand that "micron sized asperities" are not equivalent to the inclined surfaces claimed by claim 9 and

described in the present Specification. The rough shape to the surface of the reflector 401 shown in Fig. 4 of Von Gutfeld I therefore illustrates nothing more than an exaggerated view of the "micron sized asperities." The Examiner appears to have given this exaggerated view of the asperities a much broader interpretation than anything taught or suggested by Von Gutfeld. It was inappropriate for the Examiner to repeat this rejection without first addressing the merits of these previous arguments. For at least these reasons as well, the rejection of claim 9 should be withdrawn.

With respect to claim 20 of the present invention, the Examiner has not sufficiently answered Applicants' arguments traversing this rejection either. Applicants did not merely argue that Nishiguchi (U.S. 6,226,067) could not provide a suction in an atmosphere, as implied by the Examiner. Instead, the arguments provided by Applicants traversed the Examiner's own assertion that such a suction was inherent to Nishiguchi's structure. It is the Examiner's burden to establish, in asserting "inherent" features, that such features must exist, and not only that they *could* exist.

The Examiner implicitly acknowledges that Nishiguchi does not actually teach or suggest a suction to Nishiguchi's structure. The Examiner's reliance on inherency, therefore, fails to justify the rejection, because Nishiguchi actually teaches away from the assertion that its structure must necessarily provide a suction. Again, Applicants respectfully remind the Examiner that it is not Applicants' burden to prove that untaught, unsuggested features can never be present. The Examiner is instead first required to demonstrate that the

limitations at issue must be present. It is inappropriate for the Examiner to attempt to shift this burden to Applicants.

The Examiner is correct to point out that opening in Nishiguchi's seals 7 is "optional." The Examiner is incorrect, however, in asserting that the optional nature of this opening rebuts Applicants' arguments. The very fact that the opening is optional only supports Applicants' arguments that the suction cannot be inherent to the structure. It is a well-established principle in patent law that inherency cannot be established by "mere possibilities." A suction cannot be present when the seal is open. The Examiner has only established that the seal has adhesion property and is airtight. An airtight seal though, does not *inherently* contain a suction within it. As previously explained to the Examiner, an airtight seal can contain a suction, or an outward pressure, or neither a suction nor a pressure. Because Nishiguchi is entirely silent as to which, if any of these properties, may be present in its structure, the Examiner has failed to answer Applicants' arguments to this issue, and the rejection should therefore be withdrawn.

Claim 9 again stands rejected under 35 U.S.C. 102(e) as being anticipated by Von Gutfeld I. Applicants respectfully traverse this rejection for at least the reasons of record, and those discussed above. As discussed above, Von Gutfeld fails to teach a light reflection layer formed only under the sealing material. Furthermore, Von Gutfeld also fails to teach a concavo-convex structure to the light reflection layer that has inclined surfaces.

The Examiner has not rebutted these arguments, and therefore the rejection should be withdrawn.

The rejection of claim 9 should further be withdrawn because Von Gutfeld I shows that the reflector 401 is positioned *below* the substrate 104 (see Fig. 4; col. 4 lines 28-29), whereas claim 9 of the present invention recites that its light-reflection layer is formed on one of the two substrates, and then only in an area under the sealing material. In other words, the light-reflection layer of the present invention, by being formed between the sealing material and the substrate, would necessarily be on the side of the substrate facing the liquid crystal layer. Accordingly, the rejection of claim 9 based on Von Gutfeld I should be withdrawn for these still further reasons.

Claims 17-18 and 20 again stand rejected under 35 U.S.C. 102(e) as being anticipated by Nishiguchi. Applicants traverse this rejection as well for at least the reasons of record, those discussed above, and as follows.

With respect to claims 17 and 18, the Examiner has never answered the arguments traversing the rejection based on Nishiguchi, namely, that the structures 3, shown in Fig. 21b, do not control the speed of dropped liquid crystal. As previously argued, Nishiguchi specifically teaches that the nodules 3 are for "*preventing flow* of liquid crystal material," and not for controlling the speed of dropped liquid crystal. (Col. 8, lines 35-36, emphasis added). Nevertheless, in the interest of expediting prosecution only, Applicants have amended independent claim 17 to focus on the features of the recited structures that

change the spreading shape of dropped liquid crystal from a circular shape to a square shape. Nishiguchi fails to teach (or even suggest) such features. Nishiguchi shows no shape to the structures 3 that could form the liquid crystal into a square shape.

Applicants have also amended claim 18 in the interests of expediting prosecution, to clarify that the recited structures are formed in an external periphery of a pixel electrode along a long side and a short side of an external shape of the electrode, and not in a direction of a diagonal line in the electrode. Nishiguchi's nodules 3 do not teach (or suggest such features in any way. Accordingly, the rejection of claim 18 should be withdrawn for at least these reasons as well.

With respect to claim 20 of the present invention, as discussed above and previously, the Examiner simply has not met his burden to establish that the suction features recited in claim 20 of the present invention must be inherently present in Nishiguchi's structure. Section 2112 of the MPEP expressly directs the Examiner to understand that inherency "may not be established by probabilities or possibilities." The Examiner has the burden instead to show that such "inherent" properties in the prior art must be present. The Examiner has not met this burden, and the rejection of claim 20 should therefore be withdrawn without any amendments to the claim.

Claim 19 stands rejected under 35 U.S.C. 102(e) as being anticipated by Von Gutfeld (U.S. 6,219,126, "Von Gutfeld II"). Applicants respectfully traverse this rejection because the cited reference does not disclose (or suggest) a convex shaped structure for

defining a cell gap provided in a frame shape between the sealing material and the display area, as clearly recited by claim 19 of the present invention, as last amended.

The Examiner appears to rely primarily on Fig. 4 of Von Gutfeld II, asserting that the glass ridge-like spacer fillets 3a somehow form a convex shape structure. This assertion, however, is without merit. Von Gutfeld expressly teaches that the glass ridge-like spacer fillets 3a are of "substantially uniform thickness." (Col. 4, lines 66-67). By definition, a shape having "uniform thickness" cannot be convex. Von Gutfeld clearly shows that all outer dimensions of the glass spacer fillets 3a are flat, or planar, which can neither be convex nor concave by definition. One common definition of "convex," which is not inconsistent with the embodiments illustrated in the present Specification, is "curved or rounded outward like the outside of a circle." Nothing about the glass fillets 3a in Von Gutfeld II could satisfy this common, consistent definition of the word "convex."

Moreover, it is significant to note that Von Gutfeld II does show a convex structure in the *compressible* fillet 3b. (See Fig. 3). Von Gutfeld, however, teaches to *remove* the compressible fillet 3b from the structure shown in Fig. 4, in order to catch the spillover 6 of liquid crystal. Accordingly, Von Gutfeld II therefore teaches away from the Examiner's interpretation of the reference by teaching, in the embodiment relied upon by the Examiner, the removal of the only analogous ("convex") structure. Accordingly, for at least these reasons, the rejection of claim 19 based on Von Gutfeld II is traversed, and should be withdrawn.

In the interests of expediting prosecution of claim 19 though, Applicants have further amended the claim to clarify that the convex shape structure is formed on both of the two substrates. Applicants submit that this clarification even further defines claim 19 over the Von Gutfeld II reference, and that the rejection should be further withdrawn for at least these additional reasons. Von Gutfeld II clearly shows that the glass ridge-like spacer fillets are only provided on the substrate 1a. (See Fig. 4).

Claim 20 further stands rejected under 35 U.S.C. 102(e) as being anticipated by Hirataka et al. (U.S. 6,465,268). Applicants respectfully traverse this rejection for at least the reasons discussed above in traversing the rejection of this claim based on the Nishiguchi reference. The Examiner has again acknowledged that the cited reference does not teach (or suggest) a suction, and only asserts that a suction must be "inherent" to the disclosed structure. Similar to the deficiencies in the other rejection though, the Examiner has not established in any way how the mere shape of the sealing material 731, 732 in Hirataka necessarily requires the additional presence of a suction as well.

Hirataka's liquid crystal display is shown to have a liquid crystal injection inlet 206 (see Fig. 26) that is fabricated by the vacuum injection method. (See col. 11, lines 35-55). Hirataka though, fails to teach (or suggest) any additional process to actually decompress the inside frames of the gap retaining members 731, 732, which would be necessary for the members to function as a suction in an atmosphere. Accordingly, the Examiner has not provided any explanation for why the recited features of the present

invention must be present in the reference, and thus the Examiner has again failed to meet the burden to establish inherency. This rejection of claim 20 should therefore be withdrawn as well.

For all of the foregoing reasons, Applicants submit that this Application, including claims 1-2, 4-9, and 17-20 is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned Attorney if an interview would expedite prosecution.

Respectfully submitted,

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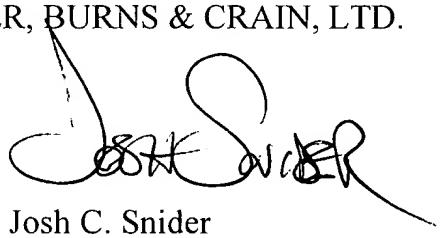
By 

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